

RELAP5 Version 4.1.3

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Outline

- RELAP5-3D Changes Since Version 4.0.3
- Performed Testing
- Version 4.1.3

RELAP5-3D Changes Since Version 4.0.3

- ***Enhanced stripping capability – user can now use keyword “all” for word 3 of the 1001-1999 strip request data to request all of a certain variable from the plot file. (i.e., 1001 mflowj all)***
- ***Updates to ensure the calculation results are the same if compiled with opt level 0 or 1.***
- ***Added capability of crossflow connections with the cladding deformation model.***
- ***Introduction of a CSV option for strip files.***
- ***Added the 2005 Groeneveld CHF correlation. This correlation can be activated with Card 1 Option 53.***
- ***Corrected left-to-right evaluation order issue. When if-statement clauses connected by an and-conjunction operator allows the code to run correctly on multi-core platforms.***

RELAP5-3D Changes Since Version 4.0.3 (cont.)

- ***Machine dependent plot files conform to preBeta (3.0.0) standard.***
- ***The plot file size limit of 4 GB is removed.***
- ***Moving problems can be modeled.***
- ***Fixed many deallocate/allocate errors.***
- ***Many restart errors were corrected.***
- ***Corrections for ‘powerx’, ‘propint’, and ‘delay’ control variables.***

Performed Testing

64-bit	64-bit with PVM
Installation test set	Installation test set
DA cases	DA cases
DOE test set	DOE test set
	PVM Test Matrix
	TestDT cases

Version 4.1.3 Update

- Additional information on many of these topics is available in the RELAP5-3D Newsletter
 - <http://www.inl.gov/relap5/newsletters.htm>
- Version 4.1.3 is complete, the manuals are nearly completed.
 - Error corrections will go into 4.1.3.1.
- This version of RELAP5-3D is available to all IRUG members upon request.

Questions?